Maintaining the Cold Chain During Transport

When transporting vaccines, think about how each vaccine was packed when you first received it from the manufacturer or distributor. Use this as a model for how to repack the individual vaccines in order to transport them at their appropriate temperature.

- Use an insulated container; include a thermometer along with the vaccines.
- Keep a temperature log. Record the temperature during transport and periodically during the entire time the vaccine is kept in the insulated container to ensure it remains within the recommended range.

	Vaccines	Special Instructions
Inactivated vaccines	• **Tetanus-diphtheria (Td)** • **Hepatitis A** • **Hepatitis B** • **Influenza, inactivated*** • **Pneumococcal** • **Meningococcal** • **Combination products of these vaccines**	• Keep cold at 35–46°F (2–8°C) and do not freeze. • Use refrigerated or frozen packs depending on the time of the year and the situation (e.g., frozen packs for hot weather while transporting outdoors, refrigerated packs for cold weather). • Make sure vaccines are kept in their original boxes. Place some insulation (e.g., crumpled paper, bubble wrap) between the vaccine boxes and the refrigerated or frozen packs to prevent the inactivated vaccine from directly touching the refrigerated or frozen packs. Put crushed paper in the cooler to keep the vaccines from shifting during transport. • During hot weather, keep the insulated container in a cool place (air-conditioned interior of car). Do not leave the vaccine container unattended or in the trunk of a parked car. During cold weather, do not leave the container in an unheated area because vaccine must not freeze. In cold weather, include a freeze indicator in the vaccine container.
Live virus vaccines	**Measles, mumps, rubella (MMR)**	• Keep cold at all times, 35–46°F (2–8°C) or colder. May use frozen packs. • If MMR is transported with inactivated vaccines, follow the packing instructions for inactivated vaccines indicated above. • If you are transporting diluent in the same cooler with the MMR, refrigerate the diluent in advance to help maintain the cold temperature in the cooler.
	Varicella It is impossible to maintain varicella vaccine at 5°F (-15°C) or colder when transporting it off-site unless you use dry ice or a special freezer unit. If vaccine must be transported, follow the instructions to the right.	Transport only the quantity needed; clearly mark the vaccine with the date and time it was removed from the original freezer unit. It is extremely important to include a thermometer in the container with the vaccine. If dry ice is available, pack the container with enough dry ice to ensure the temperature is maintained at 5°F (-15°C) or colder. If dry ice is not available, transport the vaccine on frozen packs. If the temperature within the container exceeds 5°F (-15°C) but doesn't go above 46°F (8°C), the expiration date of the vaccine is reduced to 72 hours. Vaccine that has reached temperatures above 46°F (8°C) or has exceeded the 72-hour limit cannot be used.

*For information on transporting live, attenuated intranasal influenza vaccine (FluMist), refer to the package insert.

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